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**Detection of Polyamines by a New Enzymatic Differential Assay. (7)
Fundamental Study on a New Enzymatic Differential Assay of Tissue
Polyamines**

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The enzymatic method for isolation and determination of urinary polyamines was modified to measure the polyamines in tissue. High recovery rates of polyamines in tissue by the method were obtained, namely, $104.5 \pm 7.4\%$ for diamine, $104.7 \pm 23.3\%$ for spermidine and $104.8 \pm 7.5\%$ for spermine. The results correlated well with those obtained by high performance liquid chromatography, and a close correlation was demonstrated for all fractions; diamine $r=0.8991$, $y=0.991x+0.050$; spermidine $r=0.894$, $y=1.207x+0.100$; sperimine $r=0.892$, $y=1.220x-0.219$ ($n=13$).

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**Detection of Polyamines by a New Enzymatic Differential Assay. (8)
Studies on Tissue Polyamine Concentrations in Patients with Genito-
urinary Malignant Diseases.**

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Polyamine concentrations in cancerous and non-cancerous tissues from the kidney, ureter and bladder of the patients were measured by a new enzymatic method for isolation and determination of polyamines. In cancerous and non-cancerous tissues, the spermine level was highest followed by the spermidine and diamine levels. The concentrations of diamine, spermidine and spermine in cancerous tissues were significantly higher than those in non-cancerous tissues, but there was no significant difference in the spermidine/spermine ratio. These data suggest that the production of polyamines elevated in pathological conditions such as renal cell carcinoma, ureteral cancer and bladder cancer.

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**A Methods for evaluating anti-allergic drugs by simultaneously
induced passive cutaneous anaphylaxis and mediator cutaneous reactions.**

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Homologous PCA was induced by IgE antibody and, simultaneously, cutaneous reactions (CR) were induced by mediators such as histamine, 5-HT and LTC_4 on rat back skin. Disodium cromoglycate and tranilast, inhibitors of mediator release, inhibited PCA, whereas antihistaminics inhibited histamine- and 5-HT-induced CR as well as PCA. Anti SRS-A drugs, KC-404 and FPL-55712, inhibited PCA and histamine- and 5-HT-induced CR, but did not inhibit the LTC_4 -induced CR. All reactions tested were inhibited with salbutamol, isoproterenol and theophylline, which increase the cyclic AMP level. This method enables the determination of the properties of anti-allergic drugs.